predetermined distance from a border of a non-cosited cell, said portion of the cell including a cell border area or a section of the cell border area;

determining, in response to receiving the first plurality of mobile reports, an average speech quality value of the portion of the cell;

dynamically changing the portion of the cell by decreasing the portion when a lower threshold exceeds the average speech quality value, and increasing the portion when the average speech quality value exceeds an upper threshold;

determining an interfering cell from the plurality of cells, said interfering cell causes interference within said cell;

receiving a second plurality of mobile reports from a second transceiver located in the interfering cell and from a corresponding number of second mobile terminals located in the interfering cell; and

decreasing a portion of the interfering cell to improve the average speech quality value in the cell, said portion of the interfering cell including a cell border area or a section of the cell border area.

REMARKS

The Application previously presented Claims 1-27. No claims have been added or canceled. Hence, Claims 1-27 remain pending in this Application.

Claim 12 was amended to clarify that the mobile terminals are located within a predetermined distance to a border of a non-cosited cell. Support for the amendments can be found throughout the Disclosure in general and at least on page 14, lines 16-20 of the Specification.

In the Office Action, Claims 1, 2, 4, 6-9, 11, 18-19, 21, and 27 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,898,682 (Kanai).

Claims 3, 5, 6, 10, 12-17, 20, and 22-26 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kanai in view of U.S. Patent No. 5,884,178 (Ericsson).

These rejections are respectfully traversed.

The present invention, as recited in independent Claim 1, is directed to a method of improving the speech quality in a cellular communications network. The method includes the steps of selecting a cell and evaluating a plurality of mobile reports received from mobile terminals in the cell. The particular mobile terminals that send the reports are located within a predetermined distance from a border of a non-cosited cell. A speech quality value is then determined for a **portion** of the cell based on the plurality of mobile reports. The portion of the cell is thereafter increased or decreased based on the speech quality value.

Independent Claims 12 and 18 recite similar limitations.

It is respectfully submitted that neither Kanai nor Ericsson (nor any other art of record), taken alone or in combination, discloses or suggests using reports from mobile terminals that are specifically located within a predetermined distance from a border of a non-cosited cell to determine the speech quality within a **portion** of the cell, and to thereafter increase or decrease that portion of the cell according to the speech quality.

MPEP 2142 (reproduced below) places the initial burden of establishing a prima facie case of obviousness on the Examiner.

> To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference

> teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP Section 2143 - Section 2143.03 for decisions pertinent to each of these criteria.
>
> The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). See MPEP Section 2144 - Section 2144.09 for examples of reasoning supporting obviousness rejections.

Applicants respectfully submit the Examiner has failed to establish a prima facie case of obviousness. The Examiner cites col. 6, lines 6-16 (reproduced below) of Kanai as suggestive of receiving a plurality of mobile reports from mobile terminals within a predetermined distance of a border of a non-cosited cell. (Office Action, page 2, last paragraph.) However, the cited text appears merely to disclose that uplink channel quality and downlink channel quality (from the mobile station) may be monitored. There is nothing in the cited to text to teach one of ordinary skill in the art to use mobile reports from mobile terminals within a predetermined distance of a border of a non-cosited cell, as recited in the claimed invention.

> In addition, the communication channel transmit/receive section 330 periodically measures or monitors an uplink signal quality (the bit error rate and the frame error rate) which is informed to the radio channel control section 370 by an uplink quality signal. Moreover, the communication channel transmit/receive section 330 receives a downlink quality signal which is representative of a downlink signal quality and is periodically supplied from the mobile station 410. The downlink quality signal is supplied to the radio channel control section 370 together with the uplink quality signal.

Moreover, Kanai may be considered to **teach away** from the claimed invention in that Kanai appears to use mobile reports from all the mobile terminals in the cell to determine the speech quality in the entire cell. For example, Kanai teaches that the cell size is reduced when the traffic handling amount (capacity) of the base station approaches the allowable limit. (See, e.g., col. 8, line 66 to col. 9, line 5; and col. 9, lines 55-60.) Thus, in order to establish that the traffic handling

amount in the cell is approaching the allowable limit, Kanai would have to use mobile reports from all the mobile terminals.

Ericsson also fails to teach or suggest using reports from mobile terminals that are located within a predetermined distance to the border of a non-cosited cell to determine whether to adjust the size of a selected cell. Indeed, Ericsson appears to be directed only to a method and apparatus for taking into account the effects of the Doppler shift when calculating a frequency offset value for a cell.

Therefore, even assuming *arguendo* that there is motivation to combine Kanai with Ericsson, and that the two references may be combined in some meaningful manner, the combination would not produce the claimed invention.

Accordingly, because neither Kanai nor Ericsson (nor any other art of record), taken alone or in combination, teaches or suggests the claimed invention, withdrawal of the rejection against independent Claims 1, 12, and 18 is respectfully requested.

As for dependent Claims 2-11, 13-17 and 19-27, although these claims recite independently allowable subject matter, they depend from Claims 1, 12, and 18, respectively, and are therefore allowable for at least the same reasons. Accordingly, withdrawal of the rejection against the dependent claims is also respectfully requested.

In view of the foregoing, Applicants respectfully request the thorough reconsideration of this Application and earnestly solicit an early Notice of Allowance for Claims 1-27. If any questions

or issues remain and the resolution of which the Examiner feels will be advanced by a conference with the Applicants' attorney, the Examiner is invited to contact the attorney at the number noted below.

Respectfully submitted,

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